

CLAIMS

What is claimed is:

1. A method for abating waste oxide gases from a waste oxide gas stream, the method comprising:

5 (a) providing a first industrial process, the first industrial process producing a waste oxide gas stream, the waste oxide gas stream comprising at least one waste oxide gas selected from the group consisting of nitrogen oxides, sulfur oxides and carbon oxides;

(b) providing a second industrial process, the second industrial process being a different process than the first industrial process, the second industrial process abating the quantity of said waste oxide gas stream, from the first industrial process, when said waste oxide gas stream is fed to said second industrial process as a feed stream; and

15 (c) feeding at least a portion of said waste oxide gas stream, from the first industrial process, as a feed stream, to said second industrial process.

2. The method for abating waste oxide gases from a waste oxide gas stream according to claim 1 wherein the first industrial process is chosen from the group consisting of a chemical manufacturing process, a combustion process, a process comprising a gas turbine, a high-temperature industrial manufacturing process, a process comprising an air compressor, a co-generation process, and a traditional waste oxide abatement system.

3. The method for abating waste oxide gases from a waste oxide gas stream according to claim 1 wherein the second industrial process is chosen from the group consisting of a hydrogen cyanide production process;

25 a bleaching process;
a carbon bed desorption process;
an oxidation process;
an oxidative dehydrogenation of hydrocarbons process;
an oxygen addition process;
30 an ammoxidation process;
an air stripping process;
a partial oxidation of hydrocarbon process;

a sulfuric acid regeneration process;
a reaction of tert-butanol, isobutene, iso-butane, iso-butyraldehyde or
the
methyl ether of tert-butanol to yield (meth)acrolein and/or
(meth)acrylic acid;
a phthalic anhydride reaction;
a reaction of butadiene; and
a reaction of indanes.

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4. The method for abating waste oxide gases from a waste oxide gas
stream according to claim 1 wherein the second industrial process is a process wherein
at least one of hydrogen, carbon oxides, nitrogen oxides, ammonia, hydrocarbons
and oxygen is routinely present.

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